

AN-003: Connecting CHARON-VAX to a host application

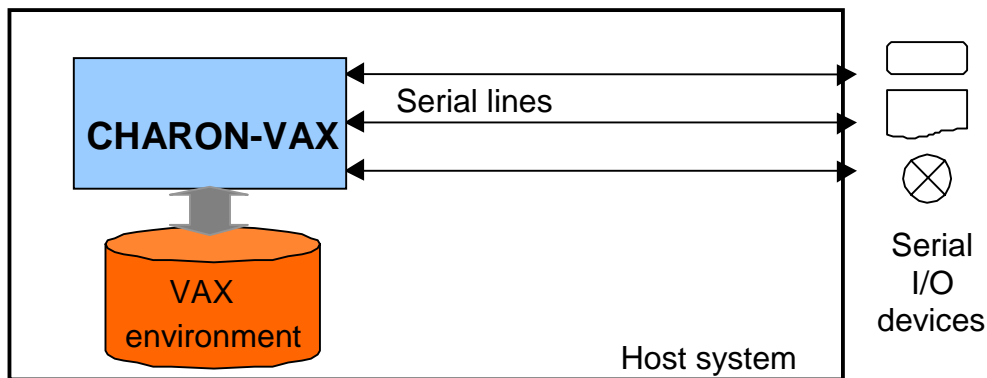
Author: Software Resources International

Date: 9 Oct 2000

CHARON-VAX is a software emulator capable of executing unmodified VAX operating system and application code. CHARON-VAX is also designed to add or modify functionality even if it is impossible or undesirable to modify the original VAX code. A flexible and powerful way of achieving this is the use of sockets.

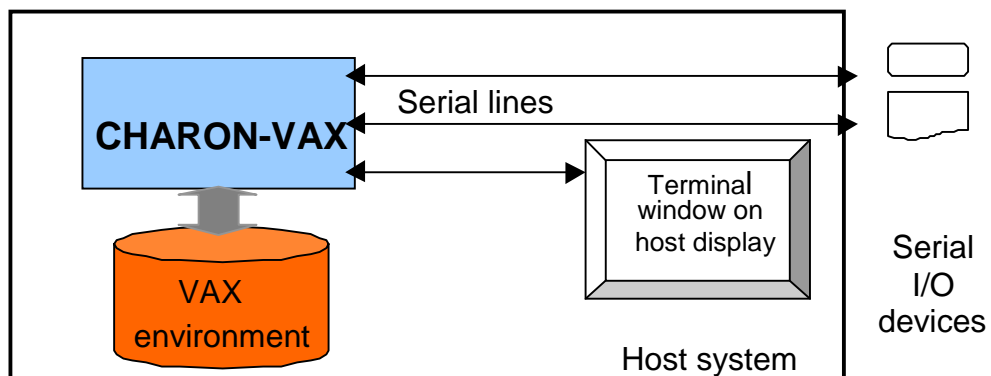
On the Windows platform, an emulated VAX serial line is represented by a socket. Usually, the emulator connects these sockets to the physical serial I/O ports of the host system, with for example the following entry in the configuration file:

```
load DHV11 YVA
set YVA line[1]="COM1:"
```



CHARON-VAX accepts also a process name in the line assignment. This is the way the internal CHARON-VAX terminal emulator is used:

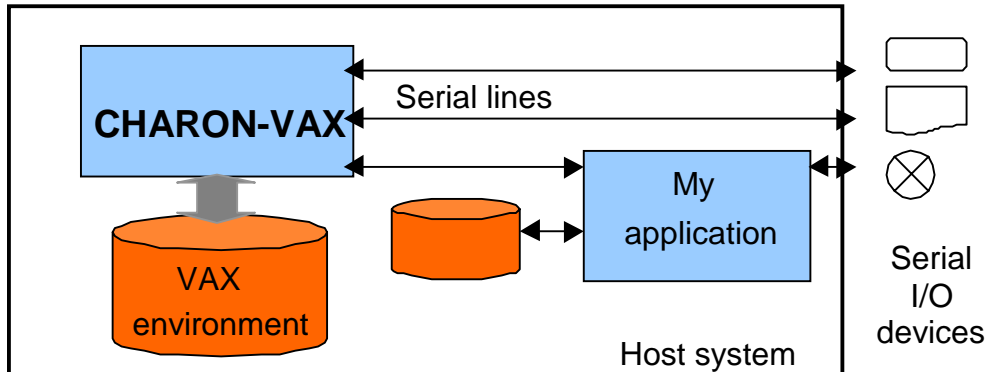
```
load DHV11 YVA
set YVA line[1]="run terminal"
```



CHARON-VAX application note AN-003

It is equally possible to specify a user written task in the line assignment, if this task connects to the provided socket. The CHARON-VAX emulator automatically invokes such task during the scanning of the configuration file:

```
load DHV11 YVA
set YVA line[1]="run c:\my_application.exe"
```



Programming example

The programming example **VAXPRINT** is a print utility to send data from a CHARON-VAX serial line to the default printer (using its default page settings) of a Windows NT/2000 host system by using the following entry in a configuration file:

```
load DHV11 YLA
set YLA line[1]="run vaxprint"
```

The VAXPRINT source code and the executable for Windows can be downloaded as VAXPRINT.ZIP and VAXPRINT.EXE respectively from the "downloads" area of the CHARON-VAX web site at <http://www.CHARON-VAX.com>. The source code is provided as a programming example for other applications.